West Virginia
Hospital Inpatient Data System

Data Collection
Policies and Procedures

February 7, 2011
Version 2.0

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(v2.0 updates shaded grey)

Contents

The West Virginia Health Care Authority (WVHCA) has been charged by the Legislature with ensuring compliance with the West Virginia Health Care Financial Disclosure Act, W. Va. Code §§16-5F-1 *et seq.* and the Financial Disclosure Rule, 65 C.S.R. 13. Collection of data for all hospital inpatient stays is a part of this duty. Data collected and analyzed through the West Virginia Hospital Inpatient Data System (WVHIDS) are used by state and federal agencies, hospitals, universities, and non-profit organizations for health care regulatory and planning purposes. The WVHCA analyzes these data to assess health care access, quality, and cost, as well as disease prevalence and disparities, in West Virginia. This information is used to inform hospital Rate Review and Certificate of Need decisions, and statewide health policy efforts.

This document outlines the required protocols for submission of hospital inpatient data to the WVHCA. Additional documents outlining guidelines and specifications for data reporting and editing can be accessed from the WVHCA website at www.hcawv.org/FinDisc/WVHIDS_Website.htm.

I. Data Specifications

A. Hospital inpatient data are required to be extracted from billing systems and submitted by all hospitals to the WVHCA in the formats outlined in the *File Format and Data Element Specifications Guides,* which specify the required data file layout and field content.

B. Data must be submitted for all hospital inpatient stays, regardless of the expected source of payment. This is to include, but is not limited to, self-pay and charity discharges, as well as long term care, skilled nursing, and swing discharges.

C. For each inpatient stay, the record(s) submitted must represent the final and complete claim. It is recommended that one final record be submitted per discharge, after the claim has been closed. However, interim and subsequent records can be submitted to adjust, supplement, or void a previously submitted claim.

D. Each discharge is uniquely identified in the data files by a combination of three fields (referred to as the discharge identification key): Medicare provider number (HOSP), patient number (PATNO), and service end date (EDATE). If multiple records are submitted for the same discharge, all records must contain the same values for these three fields.

E. For all inpatient stays that result in a birth, a separate record/claim must be submitted for mother and baby(s).

II. Data Submission and Quality

A. Discharge records are required to be submitted on a monthly basis within six weeks after the end of the submission month.

B. Data are required to be submitted to the WVHCA vendor, Thomson Reuters, utilizing the Medstat Data Submission System (MDSS) and the West Virginia On-Line Editor (OLE), as outlined in the *Data Collection Guide*.

C. Upon upload to the MDSS, edit checks are performed on the data to assess the completeness and quality of records. Results of the edit checks are displayed in the OLE and must be reviewed prior to submission of the data into the master database. A complete list of the edit checks are outlined in the *Edit Check Definitions* guide.

   i. The edit check process can produce a) questionable warnings, and/or b) rejection errors. All rejection errors must be resolved before the records can be submitted and accepted to the master database. Warnings are not required to be resolved prior to submission; however, they should be reviewed and corrected if the appropriate data are available to address the warning.

   ii. Batch-level and record-level edit checks are performed on the uploaded data. Batch-level edits compare the records within the batch to check for questionable patterns (e.g., identical admission type on all records; >40% of records missing secondary diagnosis) and duplicate records. The records in the batch are also compared to the records previously submitted to identify records that could be potential duplicates of those contained in the master database.

D. As stated in Section I.C, subsequent records can be submitted to adjust, supplement, or void claims previously submitted to the master database. There are two methods for revising master database records:

   i. Directly replace the master claim – If a new claim is uploaded that contains an identical discharge identification key (provider number, patient number, and service end date) as a claim that currently exists in the master database, the OLE system will produce an E101 Warning. If the Warning is ignored and the new claim is submitted, it will overwrite (i.e., wholly replace) the claim previously submitted to the master database with the information contained in the new record. Table II.1 provides an example of replacing a claim contained in the master database.

ii. Submit a replacement/adjustment claim – Claims with a bill type of xx5, xx7, and xx8 can be submitted to supplement a claim that currently exists in the master database. These claims must contain the same values for the fields HOSP (Medicare provider number), PATNO (patient control number), and EDATE (service end date) as the original claim in the master database. Based on the bill type, the multiple claims submitted are adjudicated to identify/create a final complete record for each discharge. Table II.2 provides an example of submitting a replacement claim. Refer to Section III for additional details on accepted bill types and adjudication rules.

Table II.1 – Example: Directly Replacing a Master File Claim

A claim record was uploaded and submitted to the master database with primary payer (PAYOR1) coded as West Virginia Medicaid. At a later date, the claim was denied by Medicaid then submitted to and paid by PEIA. The record in the WVHCA master database must be updated with the new payer information. Therefore, a replacement record that contained the same HOSP, PATNO, EDATE, and BTYPE as the original record, as well as the new/revised payer code, was uploaded to the MDSS. The OLE produced an E101 warning indicating that a record with the same identification key (HOSP, PATNO, EDATE, BTYPE) already exists in the master database. The data submitter reviewed and verified that the newly uploaded record is the most current and accurate claim for that discharge and submitted the new record to the master database. The new record replaced the original record in the master database. The record in the master database now contains the updated payer information.

	HOSP	PATNO	EDATE	BTYPE	PAYOR1
Original Master Database Record	51abcd	123456	1/1/1111	xx1	Medicaid
Replacement Record	51abcd	123456	1/1/1111	xx1	PEIA
New Master Database Record	51abcd	123456	1/1/1111	xx1	PEIA

Table II.2 – Example: Submitting a Replacement Claim

A claim record was uploaded and submitted to the master database with primary diagnosis (PDIAG) coded as 0000. At a later date, the primary diagnosis was changed to 9999 and resubmitted to the payer. The record in the WVHCA master database must be updated with the new diagnosis information. Therefore, an additional record with the new primary diagnosis code was uploaded to the MDSS. This new record contained the same PROV, PATNO, and EDATE values as the original record in the master database, but contained a bill type value of xx7 to indicate that it is a replacement of a previously submitted claim. The master database now contains two different records for the discharge. The adjudication rules applied to the master database will review all of the submitted records for that discharge and create a single record representing the final revised claim.

	HOSP	PATNO	EDATE	BTYPE	PDIAG
Master File Record (1)	51abcd	123456	1/1/1111	xx1	0000
Master File Record (2)	51abcd	123456	1/1/1111	xx7	9999

Table II. 3 – Duplicate Record Errors and Warnings

Three edit checks are performed on uploaded batches to identify potential duplicate records. Any resulting errors and warnings are displayed in the OLE and must be reviewed prior to data submission.		
E-Code	**Description**	**Action**
E10 Error	Duplicate record in current submission batch *(two or more records in current batch contain identical values for HOSP, PATNO, EDATE, BTYPE)*	Duplicate records cannot exist within the batch – Error must be resolved before the batch can be submitted
E9 Error	Complete duplicate record in current submission batch *(two or more records in current batch contain identical values for all data fields)*	Duplicate records cannot exist within the batch – Error must be resolved before the batch can be submitted
E101 Warning	Duplicate record in master file *(record(s) in current batch contain identical values for HOSP, PATNO, EDATE, BTYPE as a record in the master database)*	If submitted, the record in the current batch will replace the matching record in the master file

E. Data quality reports (DQRs) are available on the data submission and editing website to provide information regarding the completeness and accuracy of submitted data. These reports are designed to assist in the data submission process and should be reviewed regularly to identify and assess data errors. Refer to the *Data Collection Guide* for specific information on accessing and using the DQRs.

III. Adjudication

A. Since multiple records can be submitted to the master database for a single discharge, it is necessary to identify or create one record representing the final complete claim. This process, referred to as adjudication, requires that:

1. All records representing a single discharge have the same Medicare provider number and patient control number. These fields are used to identify matching records that represent the same discharge/patient in the master database.

2. The status of each submitted record is identified by a bill type (BTYPE) code. The bill type determines how the record will be processed and adjudicated. Table III.1 lists the accepted bill type codes.

B. The adjudication process is governed by the following general rules:

   i. Records with an xx1 bill type are retained as the final record, unless an xx7, xx5, or xx8 bill exists. If two or more xx1 records with the same patient control number exist in the database, the most recently submitted record is retained as the final record.

   ii. Interim claims (bill type codes xx2, xx3, and xx4) are combined to create a final complete record. A first (xx2) and final (xx4) claim must exist in the master database within a given calendar year to create a final record. All interim records must contain the same patient control number to be correctly matched and adjudicated.

   iii. Records with an xx7 bill type replace the matching records and are retained as the final record, unless an xx5 or xx8 bill exists. All xx7 records will be retained as the final record even if a matching record (e.g., xx1) does not exist in the master database.

   iv. Late charges records with an xx5 bill type are combined with matching xx1 or xx7 bills to create a final record. If a matching record does not exist in the master database, the xx5 bill will not be processed.

   v. If an xx8 bill type exists, the matching record in the master database will be voided and not processed.

C. Once a week (on Wednesday nights), the master database is adjudicated and the online data quality reports are updated with the newly adjudicated data. Data submissions and edits that occurred the prior week (Thursday – Wednesday) will not be reflected in the adjudicated data quality reports until Thursday mornings.

D. All submitted records are retained in the master database in the original format. The final adjudicated records are flagged for inclusion in the analytic file.

Table III.1 – Accepted Bill Type (BTYPE) Codes

1st Digit	2nd Digit	3rd Digit
1 – Hospital	1 – Inpatient	1 – Complete Admit to Discharge Claim
2 – Skilled Nursing Facility	2 – Inpatient Medicare Part B	2 – Interim First Claim
	8 – Hospital Swing Bed	3 – Interim Continuing Claim
		4 – Interim Last Claim
		5 – Late Charges
		7 – Replacement of Prior Claim
		8 – Void Prior Claim

IV. Reconciliation

A. In accordance with the dates specified in the *Data Submission and Reconciliation Schedule*, or as otherwise requested, a quarterly Hospital Summary Form must be completed and submitted to the WVHCA.

   i. The Hospital Summary Form should report the number of discharges that occurred in each month of the quarter for each provider number by type of discharge (i.e., acute, SNF, swing) and payer.

   ii. The form must be completed using information from internal hospital databases or billing systems.

   iii. The completed form should be compared to the *Payer Reconciliation* data quality report available on the data submission website. The counts displayed in the *Payer Reconciliation* report represent the number of adjudicated records contained in the master database.

B. The WVHCA will compare the information reported on the Hospital Summary Form and other available sources to the data submitted and adjudicated in order to assess the completeness of the WVHCA's hospital inpatient database. The WVHCA will contact hospitals to resolve any discrepancies between the Summary Form and the master adjudicated database.

V. Compliance

A. Compliance with these policies and procedures is required by W. Va. Code §§16-5F-1 *et seq.* and the Financial Disclosure Rule, 65 C.S.R. 13. Facilities are deemed out of compliance if submissions are 120 days overdue or if data quality or format is not in conformity with the required specifications.

B. Noncompliant facilities will be announced in the Health Care Authority's weekly newsletter *Health Care Matters* and will be contacted by WVHCA to develop a corrective compliance plan. Continued noncompliance may result in delayed regulatory (i.e., rate review and certificate of need) decisions and/or a monetary fine.

VI. Data Use and Release

A. At the end of each quarter, a provisional analytic file is created. This file contains the final adjudicated records. Additional fields that add value to the analytic process are created for each record, including but not limited to MSDRG, MDC, and patient age. The provisional analytic files may be analyzed to inform policy and regulatory decisions.

B. By June 30 each year, adjudication and reconciliation for the previous calendar year is completed and a final annual analytic file is produced. The analytic file is posted to the WVHCA Health IQ web-based query system, sent to the Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project for analysis and release, and disseminated to data requestors in accordance with the WVHCA's Data Release Policy.

VII. Technical Assistance

The WVHCA hosts Technical Meetings to disseminate information regarding reporting requirements, provide data submission technical assistance, and elicit feedback from hospitals related to data reporting policies and procedures. Hospital contacts will be notified of meeting dates and agendas at least two weeks prior to the meeting.

All documentation outlining the required guidelines and specifications for data reporting and editing can be accessed from the WVHCA website at www.hcawv.org/FinDisc/WVHIDS_Website.htm.

For additional information related to data reporting policies, procedures, or requirements, contact:

Sheila Chapman
Health Care Data Analyst
West Virginia Health Care Authority
Phone: 304-558-7000 ext. 235
Toll Free: 1-888-558-7002
Email: schapman@hcawv.org

For technical assistance related to the data submission website, contact Thomson Reuters and identify yourself as a West Virginia Health Care Authority Data Collection User.

Web Link: http://healthcarescience.thomsonreuters.com/healthcareproductsupport/
Toll Free: 1-877-843-6796

VIII. Required Reporting Changes

Periodically, the data reporting requirements are revised to ensure the WVHCA is securely and efficiently collecting the most useful and accurate hospital inpatient data to inform regulatory and planning efforts. These changes may affect the required data elements, data file format, and/or data submission and editing processes. Reporting changes are announced to hospital data contacts via Policy Statements or Release Notes. In addition, documentation is revised and/or developed to provide specific details regarding the changes. Reporting compliance is dependent on the successful implementation of required changes by the effective date.

Outlined below are recent reporting changes approved by the WVHCA Board of Directors.

2009

- Three new fields were added to the list of required data elements: Present on Admission (POA), National Provider Identifier (NPI), and Patient Race. All 2009 discharges will be rejected if the new required fields are not populated with valid values.
- One new field was added as strongly recommended to be reported: Patient Ethnicity.
- The new required and recommended fields may be reported using the new UB-04 Expanded format or the original UB-04 format. If data are submitted in the original UB-04 format, it will be necessary to manually enter information for POA, race, and ethnicity after upload in the OLE system.

2010

- Throughout 2010, a new 837 data submission format will be implemented. By October 1, 2010, all hospitals are required to submit a test file to Thomson Reuters in the 837 format specified in the technical guides. During the testing stage, data must continue to be submitted in the UB-04 Expanded format. Beginning January 1, 2011, all data files must be submitted in the 837 format.

2011

- Beginning January 1, 2011, all data files must be submitted in the required 837 format.
- Effective with discharges on or after January 1, 2011, the P7 Condition Code must be submitted to identify inpatient admissions directly from the emergency room/department.
- Effective with discharges on or after January 1, 2011, new POA and Payer (HCode) edits will be implemented.